UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.                                | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.         | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------------|------------------|
| 10/577,871                                     | 04/28/2006  | Timothy P. Galante   | 60.469-109 PUS1;<br>OT-5195 | 5419             |
| 64779 7590 03/05/2008<br>CARLSON GASKEY & OLDS |             |                      | EXAMINER                    |                  |
| 400 W MAPLE                                    | STE 350     | PICO, ERIC E         |                             |                  |
| BIRMINGHAM, MI 48009                           |             |                      | ART UNIT                    | PAPER NUMBER     |
|  |             |                      | 3654                        |                  |
|  |             |                      |                             |                  |
|  |             |                      | MAIL DATE                   | DELIVERY MODE    |
|  |             |                      | 03/05/2008                  | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.            | Applicant(s)               |  |  |  |
|--|----------------------------|----------------------------|--|--|--|
| Office Action Comments   | 10/577,871                 | GALANTE ET AL.             |  |  |  |
| Office Action Summary  | Examiner                   | Art Unit                   |  |  |  |
|  | ERIC PICO                  | 3654                       |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |                            |                            |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                            |                            |  |  |  |
| Status   |                            |                            |  |  |  |
| 1) Responsive to communication(s) filed on   |                            |                            |  |  |  |
|  | -·<br>action is non-final. |                            |  |  |  |
| <i>;</i> —   |                            |                            |  |  |  |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |                            |                            |  |  |  |
|  |                            | 3.3.2.3.                   |  |  |  |
| Disposition of Claims  |                            |                            |  |  |  |
| 4)⊠ Claim(s) <u>1-14</u> is/are pending in the application.  |                            |                            |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |                            |                            |  |  |  |
| 5) Claim(s) is/are allowed.  |                            |                            |  |  |  |
| 6)⊠ Claim(s) <u>1-14</u> is/are rejected.  |                            |                            |  |  |  |
| 7) Claim(s) is/are objected to.  |                            |                            |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | election requirement.      |                            |  |  |  |
|  |                            |                            |  |  |  |
| Application Papers   |                            |                            |  |  |  |
| 9)☐ The specification is objected to by the Examiner.  |                            |                            |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |                            |                            |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |                            |                            |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |                            |                            |  |  |  |
| 11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |                            |                            |  |  |  |
| Priority under 35 U.S.C. § 119   |                            |                            |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  |                            |                            |  |  |  |
| a) All b) Some * c) None of:   |                            |                            |  |  |  |
| 1. Certified copies of the priority documents  | s have been received       |                            |  |  |  |
|  |                            | on No                      |  |  |  |
| <ul><li>2. Certified copies of the priority documents have been received in Application No</li><li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li></ul>   |                            |                            |  |  |  |
|  | •                          | d III tilis National Stage |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |                            |                            |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |                            |                            |  |  |  |
|  |                            |                            |  |  |  |
|  |                            |                            |  |  |  |
| Attachment(s)  |                            |                            |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  |                            |                            |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date  Notice of Informal Patent Application  |                            |                            |  |  |  |
| Paper No(s)/Mail Date <u>04/28/2006</u> . 6) Other:  |                            |                            |  |  |  |
| · · · · · · · · · · · · · · · · · · ·  | · — — —                    |                            |  |  |  |

Art Unit: 3654

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2. **Claim(s) 1-8** is/are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 3. The term "near" in claim 1 is a relative term which renders the claim indefinite.

  The term "near" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.
- 4. Claim 1-7 recites the limitation "the door" in claim 1, lines 7 and 8; claim 2, lines 1; claim 3, lines 1-4; claim 4, line 3; claim 5, line 1; claim 6, line 2; claim 7, line 1 and 2. There is insufficient antecedent basis for this limitation in the claim.
- 5. Claim 5 recites the limitation "the extending door portion" in claim 5, lines 3 and
- 4. There is insufficient antecedent basis for this limitation in the claim.
- 6. Claim 8 recites the limitation "the doors" in claim 8, line 12. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

Art Unit: 3654

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claim(s) 1-3, 6-10, 13, and 14 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurimoto U.S. Patent No. 1203364 in view of Walter U.S. Patent No. 3315767.
- 9. **Regarding claim 1**, Kurimoto discloses an elevator car assembly, shown in Figure 3, comprising
- 10. a frame;
- 11. at least one cabin door 18' supported for guided movement relative to the frame;
- 12. a door mover 19 for moving door 1, 2, 2' between open and closed positions, the door mover 19 being supported by the frame near a lower edge of the door 18'; and
- 13. an interlock, comprised of clutch member 20, for moving a corresponding hoistway entrance door 1, 2, 2' with the cabin door, the interlock 20 being positioned near the lower edge of the door 18'.
- 14. Kurimoto is silent concerning an interlock for simultaneously moving a corresponding hoistway entrance door with a cabin door.
- 15. Walter teaches an elevator car assembly, comprising
- 16. a frame;
- 17. at least one cabin door 18 supported for guided movement relative to the frame;

Art Unit: 3654

18. a door mover 10 for moving the door between open and closed positions, the door mover 10 being supported by the frame near edge of the door 18; and

- 19. an interlock C for simultaneously moving a corresponding hoistway entrance door 22 with the cabin door 18, the interlock C being positioned near the edge of the door 18.
- 20. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the interlock disclosed by Kurimoto for simultaneously moving a corresponding hoistway entrance door with a cabin door as taught by Walter to facilitate the opening of both the hoistway entrance door and cabin door.
- 21. **Regarding claim 2**, Kurimoto discloses a sill member 8, 18 beneath the door 1, 2, 2', 18' and wherein the door mover 19 and the interlock 20 are supported beneath the sill 18.
- 22. **Regarding claim 3**, Kurimoto discloses the sill member 8, 18 is located beneath the door 1, 2, 2', 18' and supported by the frame at least partially in a plane containing the door 1, 2, 2', 18'.
- 23. **Regarding claim 6**, Kurimoto discloses the door mover 19 is supported beneath the door 1, 2, 2', 18'.
- 24. **Regarding claim 7**, Kurimoto discloses the interlock 20 is supported beneath the door 1, 2, 2', 18'.
- 25. **Regarding claim 8**, Morris et al. discloses an elevator door assembly, comprising:
- 26. a car frame having a sill 18;

Art Unit: 3654

27. at least one car door 18' supported for movement along the sill 18 between an open and a closed position;

- 28. a door mover 19 supported near a lower edge of the car door 18;
- 29. an entrance door frame 3, 4 having a header and a sill, referred to as the bottom and top of door frame 3, 4, that are adapted to be supported in a fixed position near an opening to a hoistway;
- 30. at least one hoistway door 1, 2, 2' supported for movement relative to the header and door frame sill between open and closed positions; and
- 31. an interlock 20 that couples to the hoistway door 1, 2, 2' such that the doors 1, 2, 2' move responsive to the door mover 19, the interlock 20 being supported near the door mover 19.
- 32. Kurimoto is silent concerning a car frame having a rail; at least one car door supported for movement along the rail; and an interlock that couples the car door to the hoistway door such that the doors move together responsive to the door mover.
- 33. Walter teaches an elevator door assembly, comprising:
- 34. a car frame having a rail 20 and a sill, shown in Figure 1;
- 35. at least one car door 18 supported for movement along the rail 20 and the sill between an open and a closed position;
- 36. a door mover 10 supported near an edge of the car door 18;
- 37. an entrance door frame, shown in Figure 1, having a header 58 and a sill that are adapted to be supported in a fixed position near an opening to a hoistway;

- 38. at least one hoistway door supported for movement relative to the header 58 and door frame sill between open and closed positions; and
- 39. an interlock C that couples the car door 18 to the hoistway door 22 such that the doors 18, 22 move together responsive to the door mover 10, the interlock C being supported near the door mover 10.
- 40. It would have been obvious to one of ordinary skill in the art at the time of the invention to support the car door disclosed by Kurimoto for movement along a rail as taught by Walter and make the interlock disclosed by Kurimoto couple a car door to a hoistway door such that the doors move together responsive to a door mover as tau taught by Walter to facilitate the guidance and movement of the car and hoistway door.
- 41. **Regarding claim 9**, Kurimoto discloses a sill member 18 beneath the car door 18' and wherein the car door mover 19 and the interlock 20 are supported beneath the sill 18.
- 42. **Regarding claim 10**, Kurimoto discloses the sill member 18 is located beneath the car door 18' and supported by the car frame at least partially in a plane containing the car door 18.
- 43. **Regarding claim 13**, Kurimoto discloses the car door mover 19 is supported beneath the car door 18.
- 44. **Regarding claim 14**, Kurimoto discloses the interlock 20 is supported beneath the car door 18.
- 45. Claim(s) 4, 5, 11, and 12 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurimoto U.S. Patent No. 1203364 in view of Walter U.S. Patent No.

3315767 as applied to claim 1 above, and further in view of Shalit U.S. Patent No. 4893435.

- 46. **Regarding claim 4 and 11**, Kurimoto is silent concerning the sill member includes a groove that receives a portion of the car door to guide movement of the lower portion of the car door as the car door moves between the open and closed positions.
- 47. Shalit teaches a sill member 19 includes a groove 20, 21 that receives a portion of a door 14, 15 to guide movement of the lower portion of the door 14, 15 as the door 14, 15 moves between the open and closed positions.
- 48. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a groove that receives a portion of the car door to guide movement of the lower portion of the car door as the car door moves between the open and closed positions as taught by Shalit to the sill member disclosed by Kurimoto to guide the car door panels.
- 49. **Regarding claim 5 and 12**, Kurimoto is silent concerning the portion of the car door extends through the groove in the sill member and the mover is coupled with the extending car door portion such that the mover selectively moves the car door.
- 50. Shalit teaches the portion of the door 14, 15 extends through the groove 20, 21 in the sill member 19 and the mover 10 is coupled with the extending door portion such that the mover 10 selectively moves the door 14, 15.
- 51. It would have been obvious to one of ordinary skill in the art at the time of the invention to couple the mover with the extending car door portion as taught by Shalit

Art Unit: 3654

such that the mover selectively moves the car door disclosed by Kurimoto to facilitate the opening and closing of the car door.

## Conclusion

52. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miles U.S. Patent No. 371207, Rice U.S. Patent No. 593434, Williamson U.S. Patent No. 1566713, Spasoff U.S. Patent No. 2403474, Kumagai U.S. Patent No. 3913270, Radek et al. U.S. Patent No. 4674231, Husmann U.S. Patent No. 4947964, Salmon et al. U.S. Patent No. 5427204, Princell U.S. Patent No. 5797471.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Pico whose telephone number is 571-272-5589.

The examiner can normally be reached on 6:30AM - 3:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 3654

EEP

/Peter M. Cuomo/

Supervisory Patent Examiner, Art Unit 3654